

**SHORELINE PROTECTION TABLES (SP TABLES) FOR TANK VESSEL AND
NONTANK VESSEL TRAFFIC IN CALIFORNIA'S MARINE WATERS
(Tables Dated July 17, 2006)**

PURPOSE AND SCOPE

The Shoreline Protection Tables (SP Tables) set forth planning requirements for shoreline protection for tank vessels and nontank vessels in California's marine waters. A tank vessel and nontank vessel owner/operator shall demonstrate through contracts(s) or other approved means, the shoreline protection response resources necessary to protect each type of shoreline and all applicable sensitive sites as outlined in the appropriate SP Tables. Based on these Tables the owner/operators will be able to ascertain the type of equipment that must be available for the appropriate response strategies necessary to protect the shoreline types that could be affected. For the purpose of meeting the regulatory requirements, contracts for shoreline protection services can only be made with OSROs Rated by the Office of Spill Prevention and Response.

The SP Tables are for tank vessels and nontank vessels that transit in California's marine waters. In addition, for the small harbors identified, a Small Harbor Table is included to define preparedness levels for these areas. **The Tables representing High Volume port areas (i.e., the San Francisco and Los Angeles/Long Beach Tables) will go into effect upon approval of this rulemaking; all other Tables will go into effect on September 1, 2007.**

The requirements set forth in these Tables are planning standards and may not reflect the exigencies of actual spill response. However, these are the standards that must be used to determine the amount of equipment and personnel that must be under contract or other approved means. The owner/operator is ultimately responsible for protecting the sensitive sites identified from the entire volume of an actual spill regardless of the planning volume.

Skimming assets required to execute the strategies listed in the Tables will be included as part of the required on-water recovery capacity, as stipulated in CCR Sections 818.02(e) and 827.02(h), and should not be construed as requiring additional skimming capacity. Sorbent boom requirements included in the first 24 hours of response must be on scene by hour 24, but not necessarily deployed at specific sites. In a few instances (only as indicated in the Tables) up to 2,000 feet of containment boom required to meet the 2-hour on-water containment requirement, can be utilized for shoreline protection.

An owner/operator may propose alternatives to what is listed in the SP Tables for boats and staff only. The proposal may be tested by the Administrator anytime prior or subsequent to plan approval.

The SP Tables shall be reviewed and updated as needed (e.g., to reflect updates to the ACPs, etc.). Updates to the SP Tables will be processed by OSPR staff using the procedures outlined in the Administrative Procedures Act.

A glossary of terms used in the SP Tables has been included (last page). This glossary explains the terms and abbreviations used in the tables. These are the commonly understood meanings of these terms, and are included here to make the SP Tables comprehensive, stand-alone documents.

To the greatest extent possible, California has endeavored to be consistent with the scope and intent of the Federal oil spill response regulations and the Area Contingency Plans (ACP) completed by the U.S. Coast Guard, state agencies, and local governments, with public participation, as required by the Oil Pollution Act of 1990 (33 USC 2701, et seq.).

SHORELINE PROTECTION TABLE - CALIFORNIA NORTH COAST - HUMBOLDT BAY 07/17/06

Protect by hour	Strategy or Site Number	Site Name	Harbor Boom	Swamp Boom	Other Boom Amt Type	Sorbent Boom	Anchoring Systems No. Kind	Boom Boats	Skiffs	Skimmers No. Type	Special Equipment and Notes	Staff
		Southerly Trajectory: 0 - 6 hours	6700	0	0	0	22			1		
2.5	1-340.1	Palco Marsh									Flash boards & keys to tide gates at Chevron & city	2
3	1-345.1	Elk River & Marshes									Close drop gates - bolt cutters or keys for lock	2
3	1-330.1	Indian Isl	3500				7 22 lb+ Danforth anchors	2				6
3	1-310.3*	North Humboldt Bay	2000				10 22 lb+ Danforth anchors	1				4
4	1-310.2*	North Humboldt Bay	1200				5 22 lb+ Danforth anchors	2		1 SPS		8
* up to 2000 ft of containment boom required to meet the 2 hour on-water containment requirement can be utilized												
		7-12 hours	4600		0	300	19			2		
7	1-305.2	Humboldt Bay Mouth / Samoa Spit	2000				10 22 lb+ Danforth anchors	2		1 SSS/SPS		8
7	1-328.2	Woodley Island	1200				4 22 lb+ Danforth anchors	1				5
11	1-345.2	Elk River & Marshes	1400			300	5 22 lb+ Danforth anchors		1			4
11	1-345.3	Elk River & Marshes								1 SPS/SSS		2
		13-24 hours	9650	400	0	1550	31		0	3		
13	1-328.1	Woodley Island	1200				4 22 lb+ Danforth anchors	1		1 SPS	Stakes,shovels, hammer	3
14	1-350.1	South Humboldt Bay	1200				5 22 lb+ Danforth anchors	2		2 SSS		10
24	1-320.1	Mad River Slough	1200	100		1200	4 22 lb+ Danforth anchors		1			6
24	1-324.1	Arcata Bay Sloughs - Jacoby Creek	500	100		100					Stakes,shovels, hammer	6
24	1-324.2	Arcata Bay Sloughs - Gannon Slough	500	100		100					Stakes,shovels, hammer	6
24	1-324.3	Arcata Bay Sloughs - Butcher Slough	300	50		100					Stakes,shovels, hammer	6
24	1-324.4	Arcata Bay Sloughs - McDonald Slough	150	50		50					Stakes,shovels, hammer	6
24	1-260.2	Eel River	4600				18 22 lb+ Danforth anchors	1	1			12
		25 - 60 hours	1600	200	0	100	0	1	0	0	Significant & various additional materials & equipment	

SHORELINE PROTECTION TABLE - CALIFORNIA NORTH COAST - CAPE MENDOCINO NORTH													07/17/06	
Protect by hour	Strategy or Site Number	Site Name	Harbor Boom	Swamp Boom	Other Boom Amt	Boom Type	Sorbent Boom	Anchoring Systems No. Kind		Boom Boats	Skiffs	Skimmers No. Type	Special Equipment and Notes	Staff
		First 12 hours	4600	0	0		0	18				0		
2	1-273.1	Cape Mendocino	on-water response only; no shoreline protection feasible											
2	1-268.1	False Cape Rock	on-water response only; no shoreline protection feasible											
4	1-265.1	Centerville Beach	on-water response only; no shoreline protection feasible											
12	1-260.2	Eel River	4600					18 22 lb+ Danforth anchors	1					12
		13-24 hours	11300	0	0		300	42				5		
22	1-305.2	Humboldt Bay Mouth / Samoa Spit	2000					10 22 lb+ Danforth anchors	2			1 SSS/SPS		8
23	1-350.1	South Humboldt Bay	1200					5 22 lb+ Danforth anchors	2			2 SSS		10
23	1-340.1	Palco Marsh											Flash boards & keys to tide gates at Chevron & city	2
23	1-345.1	Elk River & Marshes											Close drop gates - bolt cutters or keys for lock	2
23	1-345.2	Elk River & Marshes	1400				300	5 22 lb+ Danforth anchors		1				4
23	1-345.3	Elk River & Marshes										1 SPS/SSS		2
24	1-330.1	Indian Isl	3500					7 22 lb+ Danforth anchors	2					6
24	1-310.3*	North Humboldt Bay	2000					10 22 lb+ Danforth anchors	1					4
24	1-310.2*	North Humboldt Bay	1200					5 22 lb+ Danforth anchors	2			1 SPS		8
		25 - 60 hours	6150	1800	700		1650	16				0	Significant & various additional materials & equipment	

SHORELINE PROTECTION TABLE - CALIFORNIA NORTH COAST - PT ARENA													07/17/06	
Protect by hour	Strategy or Site Number	Site Name	Harbor Boom	Swamp Boom	Other Boom Amt Type	Sorbent Boom	Anchoring Systems No. Kind		Boom Boats	Skiffs	Skimmers No. Type	Special Equipment and Notes	Staff	
		First 6 hours	600	300	0	0	3				0			
2	1-486.1	Point Arena	on-water response only; no shoreline protection feasible											
2	1-484.3	Garcia River & Manchester State Beach	600				3 22 lb+ Danforth anchors			1			5	
5	1-482.2	Alder Creek		300									5	
6	1-480.1	Irish Gulch	on-water response only; no shoreline protection feasible											
		7 to 24 hours	1400	0	100	300	28				0			
13	1-478.1	Elk Creek	on-water response only; no shoreline protection feasible											
13	1-476.1	Bonee Gulch	on-water response only; no shoreline protection feasible											
13	1-474.2	Greenwood Creek to Cuffey's Cove										over-flight assessment needed		
16	1-472.2	Navarro River St Pk	1000				12 22 lb+ Danforth anchors			2			8	
17	1-470.1	Salmon Point and Big Salmon Creek										install filter fence: fencing & 200 pom-poms	3	
18	1-468.1	Albion River	300			300	12 22 lb+ Danforth anchors			1			5	
20	1-466.1	Dark Gulch	on-water response only; no shoreline protection feasible											
24	1-464.2	Van Dam St Pk and Little River	100		100 OS*		4 22 lb+ Danforth anchors						3	
		25 - 60 hours	3000	0	0	3200	35				1	Significant & various additional materials & equipment		

SHORELINE PROTECTION TABLE - S.F. PORT - NORTH COASTAL: PT REYES SOUTHERLY TRAJECTORY													07/17/06
Protect by hour	Strategy or Site Number	Site Name	Harbor Boom	Swamp Boom	Other Boom Amt Type	Sorbent Boom	Anchoring Systems No. Kind		Boom Boats	Skiffs	Skimmers No. Type	Special Equipment and Notes	Staff
		First 6 hours	3000	0	0	0	8				0		
3	2-201.1	Pt. Reyes Headlands	on-water response only; no shoreline protection feasible										
6	2-207.1	Limnatour Spit	on-water response only; no shoreline protection feasible										
6	2-203.2	Drakes Beach (West)	3000				8 22#+ Danforth		3				9
		7-24 hours	6000	4900	3050	11600	87				3		
8	2-198.1	Point Reyes Beach	on-water response only; no shoreline protection feasible										0
12	2-210.1	Point Resistance	on-water response only; no shoreline protection feasible										0
12	2-213.1	Miller Point	on-water response only; no shoreline protection feasible										0
12	2-216.1	Double Point and Stormy Stack			1000 OB*		10 40#+ Danforth		2				0
12	2-205.1	Drakes Estero			2000 OB*		25 40#+ Danforth		4				12
12	2-205.2	Drakes Estero	6000			2000	30 22#+ Danforth		4	4	3 SFS/SPS		28
12	2-219.1	Duxbury Reef				5000							
14	2-198.1	Pt. Reyes Beach	on-water response only; no shoreline protection feasible										
18	2-197.1	Abbott's Lagoon		500		600	6 12#+ Danforth			1			2
20	2-222.1	Bolinas Lagoon		3000	50 OS*	1000	8 4x12+# anchors + 4 stakes			3			6
24	2-225.1	Redwood Creek/Big Lagoon/Muir Beach		200		1000	2 small anchors or stakes						18
24	2-228.1	Rodeo Lagoon		1200		2000	6 small anchors or stakes			2			18
24	2-231.1	Bird Island	on-water response only; no shoreline protection feasible										
		25 - 30 hours	0	0	11000	0	20				0	Significant & various additional materials & equipment	
		31 - 42 hours	11400	2750	0	1250	47				0	Significant & various additional materials & equipment	
		43 - 60 hours	3500	300	0	130	19				0	Significant & various additional materials & equipment	

SHORELINE PROTECTION TABLE - S.F. PORT - SOUTH COASTAL: PILLAR PT. NORTHERLY TRAJECTORY													07/17/06
Protect by hour	Strategy or Site Number	Site Name	Harbor Boom	Swamp Boom	Other Boom Amt Type	Sorbent Boom	Anchoring Systems No. Kind		Boom Boats	Skiffs	Skimmers No. Type	Special Equipment and Notes	Staff
		First 6 hours	0	50	0	50	8				0		
2	2-260.1	Seal Cove to Pillar Point	on-water response only; no shoreline protection feasible										
5	2-258.1	Point Montara Area	on-water response only; no shoreline protection feasible										
6	2-253.1	San Pedro Creek		50		50	8 stakes						2
5	2-255.1	Shelter Cove & San Pedro Rock	on-water response only; no shoreline protection feasible										
		7-24 hours	500	12350	0	200	25				0		
11	2-262.4	Pillar Point Marsh & Denniston Creek	500				9 2/50+ & 7/22 danforths		1	1			5
12	2-262.1	Pillar Point Marsh & Denniston Creek										culverted berm using sandbags or earthmovers	2
12	2-262.2	Pillar Point Marsh & Denniston Creek		50			3 stakes						2
16	2-262.5	Pillar Point Marsh & Denniston Creek		12300		200	13 12+# danforths & stakes		2	2			10
		25 - 30 hours	400	0	7000	0	4				0	Significant & various additional materials & equipment	
		31 - 36 hours	2400	0	4000	700	27				0	Significant & various additional materials & equipment	
		37 - 42 hours	9000	1400	0	3500	22				0	Significant & various additional materials & equipment	
		43 - 60 hours	1500	5650	50	6130	27				0	Significant & various additional materials & equipment	

SHORELINE PROTECTION TABLE - S.F. PORT - SOUTH S.F. BAY / ANCHORAGE 9 07/17/06

Protect by hour	Strategy or Site Number	Site Name	Harbor Boom	Swamp Boom	Other Boom Amt Type	Sorbent Boom	Anchoring Systems No. Kind	Boom Boats	Skiffs	Skimmers No. Type	Special Equipment and Notes	Staff
		First 6 hours	7300	300	0	900	16			0		
2	2-307.1	Alameda Eelgrass Beds									Initial on-site assessment needed	1
3	2-309.1	San Leandro Bay	1200	300		200	5 22+# danforth & chain	2	1		Bboat: very shallow draft	8
4	2-309.2	San Leandro Bay	1500				4 22+# danforth	2	1			8
4	2-310.1	Bay Farm Island Eelgrass Beds									Initial on-site assessment needed	1
3	2-351.1	Yerba Buena Island	3000				7 22+# w/ 20' 1/2" chain	3	1		3000' 1/2" anchor line	11
6	2-401.1	Pier 39	1600			700	tie boom to pilings/breakwall	1			boom tending for traffic;skimming 2 SSS, 1 SPS	3
		7-12 hours	4600	550	0	250	25			0		
7	2-495.1	Emeryville Lagoon/Mudflats	3600				7 22+# danforth + 15' chain	3	2		Bboat: 1 very shallow draft	13
7	2-490.1	Berkeley Eelgrass Beds									Initial on-site assessment needed	1
12	2-403.1	Crissy Field Tidal Marsh		300			3 1/12+/danforth w chain & 2 stakes		1			3
12	2-354.1	Islais Creek - Pier 94 Saltmarsh	1000	50		50	3 22+# danforths & stakes	1	1			3
12	2-353.1	Heron's Head Park - India Basin		200		200	12 12 stakes					2
		13-18 hours	7800	1950	0	200	25			0		
14	2-312.1	Oyster Point Bay		850			2 12#+ danforths + 4 stakes		2			4
14	2-352.2	South Basin, Hunters Point	500				2 22+# danforth	1			shallow water Bboat	3
14	2-453.1	Brook's Island	2300				7 22+# danforth	1	1		boom boat capable of withstanding grounding	3
18	2-480.2	Albany Marsh	2500				6 22+# danforth	3	2		very shallow Bboats , skimmers & stakes.	12
18	2-454.1	Richmond Inner Harbor/Hoffman Marsh	2500	1100		200	8 22+# danforth, 15' 1/2 chain	2	2		Shallow draft boom boat.	8
		19-24 hours	6000	2400	0	500	22			0		
23	2-420.1	Richardson Bay Marshes	2700			500	12 22+# danforths + chain	3	1		Bboats capable of shallows & obstructions	11
24	2-420.2	Richardson Bay Marshes	3300				3 22+# danforths + chain	2				6
24	2-422.1	Keil Cove		2400			7 20+# danforths + chain	2			1,200 feet of 1/2" anchor rope	5
		25 - 36 hours	12500	2650	100	500	76			2	Significant & various additional materials & equipment	
		37 - 42 hours	20900	15200	4050	8700	195			1	Significant & various additional materials & equipment	
		43 - 60 hours	0	3400	0	3000	0			0	Significant & various additional materials & equipment	

SHORELINE PROTECTION TABLE - S.F. PORT - CENTRAL SAN FRANCISCO BAY 07/17/06

Protect by hour	Strategy or Site Number	Site Name	Harbor Boom	Swamp Boom	Other Boom Amt Type	Sorbent Boom	Anchoring Systems No. Kind	Boom Boats	Skiffs	Skimmers No. Type	Special Equipment and Notes	Staff
		First 6 hours	11400	0	0	0	27			0		
3	2-351.1	Yerba Buena Island	3000				7 22#+ w/ 20' 1/2" chain	3	1		3000' 1/2" anchor line	11
5	2-453.1	Brook's Island	2300				7 22#+ danforths + chain	1	1		boom boat capable of withstanding grounding	4
5	2-495.1	Emeryville Lagoon/Mudflats	3600				7 22#+ danforth + 15' chain	3	2		Bboat: 1 very shallow draft	13
5	2-490.1	Berkeley Eelgrass Beds									Initial on-site assessment needed	1
6	2-480.1	Albany Marsh	2500				6 22#+ danforths	3	2		very shallow Bboats , skimmers & stakes.	12
		Ebb 7-12	2500	2500	4000	3200	35			0		
7	2-454.1	Richmond Inner Harbor/Hoffman Marsh	2500	1100		200	8 22#+ danforth, 15' 1/2 chain	2	2		Shallow draft boom boat.	8
9	2-234.2	Point Bonita and Bonita Cove			2000 OB*		10 40-60# Danforth	2				9
9	2-236.2	Pt. Diablo to Lime Point			2000 OB*		10 40-60# Danforth	2				13
11	2-225.1	Redwood Creek/Big Lagoon/Muir Beach		200		1000	3 small anchors or stakes					2
11	2-228.1	Rodeo Lagoon		1200		2000	4 small anchors or stakes		1			2
		Flood 13-18	13300	4150	0	2650	69			0		
13	2-451.1	Castro Rocks	3000			300	10 5/40+ northhill & 7/22+ danforth	3			maneuverable Bboats & 1500' line	11
13	2-403.1	Crissy Field Tidal Marsh		300			3 12#+ danforth w chain & stakes		1			3
13	2-401.1	Pier 39	1600			700	tie boom to pilings/breakwall	1			boom tending for traffic	3
14	2-452.2	Richmond Eelgrass Beds	2500				6 22# + chain	2	1			6
14	2-452.1	Richmond Eelgrass Beds		300			3 stakes or anchors		1			2
14	2-420.1	Richardson Bay Marshes	2700			500	12 22#+ danforths + chain	3	1		Bboats capable of shallows & obstructions	11
14	2-422.1	Keil Cove		2400			7 20#+ w/ 10' 1/2" chain	2			1,200 feet of 1/2" anchor rope	5
14	2-506.1	San Pablo Bay Eelgrass Bed									Initial on-site assessment needed	2
15	2-353.1	Heron's Head Park - India Basin		200		200	20 stakes					2
15	2-354.1	Islais Creek - Pier 94 Saltmarsh	1000	50		50	3 22#+/danforths & stakes	1	1			3
15	2-352.2	South Basin, Hunters Point	500				2 22#+ danforth	1			*shallow water Bboat	3
18	2-502.1	San Pablo Creek Marshes	2000				15		2	2		10
18	2-503.1	Pinole Pt. Marshes-South		900		900	8 12#+ Danforth anchors	1	1			5
		Ebb19-24	11800	2500	0	0	32			0		
19	2-501.1	Castro Creek and Marshes	4000				10 22#+ Danforth + 20' chain	4				16
19	2-451.3	Castro Rocks	3000	2500			15 5/40+/northhills & 10/22+/Danforths	3	1		maneuverable Bboats & 1500' line	11
19	2-307.1	Alameda Eelgrass Beds									Initial on-site assessment needed	1
20	2-309.2	San Leandro Bay	1500				4 22#+ danforth	2	1			8
24	2-420.2	Richardson Bay Marshes	3300				3 22#+ danforths + chain	2				6
		25 - 30 hours	19600	4300	1050	7600	78			0	Significant & various additional materials & equipment	
		31 - 42 hours	9600	600	0	0	20			0	Significant & various additional materials & equipment	
		43 - 60 hours	9000	500	2000	2600	79			3	Significant & various additional materials & equipment	

SHORELINE PROTECTION TABLE - S.F. PORT - SAN PABLO BAY GRA 5 07/17/06												
Protect by hour	Strategy or Site Number	Site Name	Harbor Boom	Swamp Boom	Other Boom Amt Type	Sorbent Boom	Anchoring Systems No. Kind	Boom Boats	Skiffs	Skimmers No. Type	Special Equipment and Notes	Staff
		First 6 hours	8500	1200	0	900	42			0		
3	2-452.2	Richmond Eelgrass Beds	2500				6 22# + chain	2	1			6
4	2-501.1	Castro Creek and Marshes	4000				10 22#+/Danforth + 20' chain	4				12
4	2-506.1	San Pablo Bay Eelgrass Bed										
4	2-502.1	San Pablo Creek Marshes	2000				15 12+# Danforth	2	2			10
5	2-503.1	Pinole Pt. Marshes-South		900		900	8 12#+ Danforth anchors	1	1			5
6	2-452.1	Richmond Eelgrass Beds		300			3 stakes or anchors	0	1			2
		7-12 hours	8400	4900	0	6000	38			0		
7	2-451.3	Castro Rocks	3000	2500			15 5/40#+ northhills & 10/22#+Danforths	3	1		maneuverable Bboats & 1500' line	11
7	2-503.2	Pinole Pt. Marshes-South	5400			6000	16 22#+ danforth	2	1			8
10	2-422.1	Keil Cove		2400			7 20#+ w 10' 1/2" chain	2			1,200 feet of 1/2" anchor rope	5
		13-24 hours	11300	3200	0	0	30			0		
13	2-451.2	Castro Rocks	6000				8 22+# Danforth	4				
16	2-453.2	Brook's Island		3200			8 5/22#+/danforth & 3 stakes	1	1		boom boat capable of withstanding grounding	4
17	2-453.1	Brook's Island	2300				7 22+# danforths + chain	1	1		boom boat capable of withstanding grounding	3
24	2-427.1	Marin Islands	3000				7 22+/danforths + chain.	3				9
		25-30 hours	12900	1100	0	0	23			0	Significant & various additional materials & equipment	
		31-36 hours	9000	0	0	600	26			0	Significant & various additional materials & equipment	
		37-60 hours	13200	1700	0	800	30			0	Significant & various additional materials & equipment	

SHORELINE PROTECTION TABLE - S.F. PORT - SUISUN BAY GRA 6

07/17/06

Protect by hour	Strategy or Site Number	Site Name	Harbor Boom	Swamp Boom	Other Boom Amt Type	Sorbent Boom	Anchoring Systems No. Kind	Boom Boats	Skiffs	Skimmers No. Type	Special Equipment and Notes	Staff
		First 6 hours	9500	3150	0	4700	97			0		
2	2-605.2	Hastings Slough & Point Edith Marshes	2400				6 22#+/danforths + 20'chain	3				9
3	2-605.1	Hastings Slough & Point Edith Marshes	1500	1100		2300	38 5/22#+ & 11/12#+ danforth & 22 stakes	2	6		bboat: shallow, strandable. Stakes	18
3	2-607.1	Weapons Station Marshes & Seal Islands		1150		900	13 3/12#+/danforth & 10 stakes		1			2
4	2-631.2	Roe Island	3000				7 50#+ danforth + heavy chain	3	1			9
4	2-603.1	Bulls Head marsh and Pacheco Creek	1100	400		1000	19 4/22#+ & 5/12#+ danforths & 10 stakes	1	2		bboat: strandable, shallow water, stakes	7
5	2-608.1	Shore Acres Marsh		500		500	10 5#+ danforths & stakes	1	1			3
5	2-633.1	Middle Ground Island	1500				4 22#+ danforths & chain	2	1			8
		7-12 hours ebb	6300	4550	0	6500	83			0		
7	2-702.1	Stake Point Marshes	2000			600	10 4/22#+ & 6/12#+/danforths stakes	3	2			10
7	2-752.1	Chips Island, Southern Side	1500			300	20 20/12#+ danforths & 18 stakes	2	1		Bboat: shallow draft	8
8	2-673.1	Honker Bay East - Chipps Island Shore		2000		1000	15 3/22#+ & 4/12#+ danforth & 8 stakes	2	1			8
8	2-601.2	Martinez Marsh	600				1 22#+/danforth + 20' chain	1				3
9	2-601.1	Martinez Marsh		250		1300	1 12#+ anchor & stakes		1		boat capable of shallow grounding	2
11	2-632.1	Ryer Island	2200	1700		3000	30 15/22#+& 15/5#+/danforth 20 stakes	4	3		1 very shallow draft boats & 18 flags	18
12	2-631.1	Roe Island		600		300	6 12#+/danforths & stakes		1		very shallow boat, draft airboat or hovercraft &	2
		13-18 hours flood	9000	3450	0	400	37			0		
13	2-705.1	Mallard Island	2200			400	12 8/22# & 4/12# danforth	3	2			14
13	2-667.1	Freeman & Snag Islands	1200	250			8 12#+/danforths & stakes	1	2			7
14	2-667.2	Freeman & Snag Islands	1300				6 22#+/danforths & stakes	2				6
14	2-671.1	Honker Bay West - Wheeler Island Shore	1300	700			6 12#+/danforths & stakes	2	4			15
17	2-668.1	Dutton Island		2500								12
18	2-755.1	Spoonbill Creek	3000				5 22#+ danforth & 100' line	3	1			11
		18 - 24 hours ebb	7100	300	0	300	23			1		
19	2-660.2	Grizzly Bay	300				2 22#+/danforth & chain	1			shallow draft boom boat - grounding capable	3
20	2-672.1	Honker Bay North - Van Sickle Island	800	300		300	8 12#+ danforths	2	2	1 SSS		10
20	2-712.1	Winter Island	6000				13 50#/danforth anchors	6	4			26
		25 - 30 hours	6900	7050	0	1000	42			2	Significant & various additional materials & equipment	
		31 - 36 hours	0	5000	0	3000	6			0	Significant & various additional materials & equipment	
		37 - 42 hours	9500	4650	0	150	24			0	Significant & various additional materials & equipment	
		43 - 60 hours	3900	6350	0	1300	25			0	Significant & various additional materials & equipment	

SHORELINE PROTECTION TABLE - CENTRAL CALIFORNIA COAST - MONTEREY ANCHORAGE A 07/17/06

Protect by hour	Strategy or Site Number	Site Name	Harbor Boom	Swamp Boom	Other Boom Amt Type	Sorbent Boom	Anchoring Systems No. Kind	Boom Boats	Skiffs	Skimmers No. Type	Special Equipment and Notes	Staff
		First 6 hours	7500	0	0	0	6			0		
2	3-375.1	USCG Jetty in Monterey Bay	3000				3 large Danforth, as needed	3				9
2	3-370.1	Monterey Harbor Entrance	4500				3 large Danforth, as needed	3				9
2	3-360.1	Monterey State Beach	on-water response only; no shoreline protection feasible									
4	3-340.1	Monterey Bay Dunes	on-water response only; no shoreline protection feasible									
5	3-380.1	Point Cabrillo	on-water response only; no shoreline protection feasible									
		7 - 18 hours	0	2000	0	0	8			0		
10	3-345.1	Marina St. Beach	on-water response only; no shoreline protection feasible									
16	3-330.1	Salinas River Inlet		2000			8 4 Stakes & 4 Danforths	1			2000 sand bags, 3600' 6" PVC pipe, 2 ATVs, FE Loader or equivalent berming; VSW boomboat	10
17	3-325.1	Salinas River State Beach	on-water response only; no shoreline protection feasible									
		19-24 hours	5500	7600	14000		18			3		
19	3-305.1	Moss Landing Inlet	5500	1600	2000 OS*		10 7 Stakes & 3 Danforth	4		3 SSS	Very Shallow Water boomboat	20
19	3-310.1	Elkhorn Slough		6000	12000 OS*		8 4 Stakes & 4 Danforth	2			Very Shallow Water boomboat	10
23	3-301.1	Zmudowski Beach St. Park	on-water response only; no shoreline protection feasible									
		25 - 60 hours	7100	3600	2450	200	93			1	Significant & various additional materials & equipment	

SHORELINE PROTECTION TABLE - CENTRAL CALIFORNIA COAST - PT BUCHON / MORRO BAY AREA 07/17/06												
Protect by hour	Strategy or Site Number	Site Name	Harbor Boom	Swamp Boom	Other Boom Amt Type	Sorbent Boom	Anchoring Systems No. Kind	Boom Boats	Skiffs	Skimmers No. Type	Special Equipment and Notes	Staff
		First 6 hours	8700	750	0	5000	70			3		
2	4-310.2	Islay Creek		100			2 small anchors or stakes				berm dike w/ flow-through pipes	6
2	4-315.1	Lion Rock	on-water response only; no shoreline protection feasible									
3	4-300.1	Morro Bay Sand Spit	on-water response only; no shoreline protection feasible									
4	4-200.1	Morro Bay Inlet	2000				2 40 lb. Anchors	2		1 SFS/SPS		
4	4-200.2	Morro Bay Inlet	2000				2 40 lb. Anchors	2		1 SSS/SPS		6
4	4-200.3	Morro Bay Inlet	3500				2 40 lb. Anchors	2		1 SSS/SPS		6
4	4-150.1	Morro Rock	on-water response only; no shoreline protection feasible									
5	4-215.1	Morro Bay St. Park Marina	1200				2 40 lb. Anchors		2			8
5	4-220.1	Morro Bay Marsh Habitat				5000	50 stakes					6
5	4-225.1	Chorro Creek Inlet		50			2 small anchors or stakes					4
5	4-230.1	Los Osos Creek Inlet		50			2 small anchors or stakes					4
5	4-235.2	Sweet Springs Marsh		50			2 small anchors or stakes					4
5	4-240.1	Cuesta by the Sea Inlet		200			2 small anchors or stakes					4
6	4-145.1	Morro Strand State Beach	on-water response only; no shoreline protection feasible									
6	4-140.1	Morro Strand State Beach - South	on-water response only; no shoreline protection feasible									
6	4-135.2	Torro Creek		300			2 small anchors or stakes					4
6	4-130.1	Morro Strand State Beach - North	on-water response only; no shoreline protection feasible									
		7 - 24 hours	1000	300	0	0	8			0		
18	4-125.2	Cayucos Creek Inlet		200			2 small anchors or stakes					4
18	4-120.1	Cayucos Point	on-water response only; no shoreline protection feasible									
18	4-115.2	Villa Creek		100			2 small anchors or stakes					4
24	4-320.1	Diablo Canyon Pwr Plant	1000				4 med anchors		2			6
		25 - 60 hours	0	0	0	0	0			0	Significant & various additional materials & equipment	

SHORELINE PROTECTION TABLE - SANTA BARBARA CHANNEL / PT CONCEPTION 07/17/06													
Protect by hour	Strategy or Site Number	Site Name	Harbor Boom	Swamp Boom	Other Boom Amt Type	Sorbent Boom	Anchoring Systems No. Kind		Boom Boats	Skiffs	Skimmers No. Type	Special Equipment and Notes	Staff
		First 6 hours	0	400	0	380	13				0		
2	4-567.01	Pt. Conception/Government Pt.	on-water response only; no shoreline protection feasible										
4	4-570.01	Damsite Canyon Creek		100		80	5					1 FE Loader, 3 culvert, 20 sandbags, 10 skakes, troll plastic	5
4	4-572.01	San Augustine Creek										20 Sand Bags, 1 Roll Plastic, 3 Culverts, 15 Stakes	3
4	4-575.01	Arroyo El Bolito		100		100	4					1 FE Loader, 1 Roll Plastic, 3 Culverts, 20 Sand Bags, 15 Stakes	5
5	4-580.01	Canada De Santa Anita (Creek)		200		200	4					1 FE Loader, 1 Roll Plastic, 3 Culverts, 20 Sand Bags, 15 Stakes	5
		7-12 hours	0	800	0	800	12				0		
8	4-585.01	Canada De Alegria		200		200	4					1 FE Loader, 1 Roll Plastic, 3 Culverts, 20 Sand Bags, 15 Stakes	5
11	4-590.01	Canada Del Agua Caliente		200		200	4					1 FE Loader, 1 Roll Plastic, 3 Culverts, 20 Sand Bags, 15 Stakes	5
11	4-601.01	Gaviota Creek		400		400	4 22 Lb. Danforth or Equiv.					1 FE Loader, 1 Roll Plastic, 3 Culverts, 20 Sand Bags, 15 Stakes	5
		13-24 hours	0	400	0	400	8				0		
13	4-605.01	Canada Del Alcatraz & Cementario Cks					4					50 Sand Bags, 1 Roll Plastic, 3 Culverts	5
18	4-610.01	Refugio Creek		400		400	4					1 FE Loader, 1 Roll Plastic, 3 Culverts, 20 Sand Bags, 15 Stakes	5
		25 - 60 hours	2500	5830	0	7240	52				0	Significant & various additional materials & equipment	

SHORELINE PROTECTION TABLE - PORT HUENEME												07/17/06	
Protect by hour	Strategy or Site Number	Site Name	Harbor Boom	Swamp Boom	Other Boom Amt Type	Sorbent Boom	Anchoring Systems No. Kind		Boom Boats	Skiffs	Skimmers No. Type	Special Equipment and Notes	Staff
		First 6 hours	5400	0	0	2500	16				0		
2	4-769.01	Oxnard State Beach	on-water response only; no shoreline protection feasible										
2	4-775.01	Channel Islands Harbor	3000			1500	8	22 Lb. Danforth or Equiv.	2	2			10
2	4-780.01	Port Hueneme	2400			1000	8	22 Lb. Danforth or Equiv.	2	2			10
3	4-765.01	Mandalay State Beach	on-water response only; no shoreline protection feasible										
6	4-761.01	McGrath Lake and State Beach	on-water response only; no shoreline protection feasible										2
		7 to 18 hours	2000	3000	0	3000	27				1		
8	4-750.01	Santa Clara River Estuary		1500		1000	6	22 Lb. Danforth or Equiv.		1		1 FE loader, 1 roll plastic, 40 sand bags, 6 culverts, 150 stakes	10
9	4-747.01	Ventura Harbor	2000			1000	15	22 Lb. Danforth or Equiv.	2	2	1 SSS		10
10	4-783.01	Ormond Beach Wetlands & State Beach		1500		1000	6					1 FE loader, 1 roll plastic, 40 sand bags, 6 culverts, 150 stakes	10
18	4-743.01	San Jon - Ventura State Beach Area	on-water response only; no shoreline protection feasible										4
		19 - 24 hours	0	1000	0	3400	6				0		
19	5-740.01	Ventura River Mouth		1000		1000	6	22 Lb. Danforth or Equiv.		1		1 FE loader, 1 roll plastic, 40 sand bags, 6 culverts, 100 stakes	7
		25 - 60 hours	0	1200	0	1200	10				0	Significant & various additional materials & equipment	

SHORELINE PROTECTION TABLE - LA / LB PORT - HARBOR BREAKWATER 07/17/06

Protect by hour	Strategy or Site Number	Site Name	Harbor Boom	Swamp Boom	Other Boom Amt Type	Sorbent Boom	Anchoring Systems No. Kind	Boom Boats	Skiffs	Skimmers No. Type	Special Equipment and Notes	Staff
		First 6 hours	5400	0	0	0	9			0		
5	5-260.1	Alamitos Bay/Los Cerritos Wetlands	800					1				2
6	5-310.1	Anaheim Bay (Seal Beach NWL Refuge)	1500				4 Danforth 40lb	1				4
6	5-310.2	Anaheim Bay (Seal Beach NWL Refuge)	3100				5 Danforth 40lb	1				4
		7- 12 hours	4200	0	7500	200	8			0		
7	5-240.1	Long Beach Harbor Breakwater			3750 OB*		towed boom array	10				20
7	5-230.1	Middle Breakwater			3750 OB*		towed boom array	10				20
7	5-250.1	Golden Shore Marine Reserve	200			200						2
8	5-250.2	Golden Shore Marine Reserve	2000				4 Danforth 40lb	1				4
12	5-320.1	Bolsa Chica	2000				4 Danforth 40lb	1				4
		13 - 24 hours	0	0	3750		0			0		
24	5-220.1	Los Angeles Harbor Breakwater			3750 OB*		towed boom array	10				20
		25 - 60 hours	1200	0	0		5			0	Significant & various additional materials & equipment	

SHORELINE PROTECTION TABLE - SAN DIEGO BAY AT MOUTH

07/17/06

Protect by hour	Strategy or Site Number	Site/Strategy Name	Harbor Boom	Swamp Boom	Other Boom Amt Type	Sorbent Boom	Anchoring Systems No. Kind	Boom Boats	Skiffs	Skimmers No. Type	Special Equipment and Notes	Staff
		First 6 hours	6000	0	0	0	13			0		
2	6-410.1	USN Marine Mammals Research Center									Immediately contact duty veterinarian	1
3	6-400.6*	Shelter Island Deflection boom	3500				8 heavy anchor systems	2				4
4	6-400.7*	North Island Collection boom	2500				5 heavy anchor systems	1				4
* up to 2000 ft of containment boom required to meet the 2 hour on-water containment requirement can be utilized												
		7 - 12 hours	2000	0	0	0	8			0		
7	6-415.1	Navy Magnetic Silencing Facility	1500				3 light wt anchor systems	1				3
12	6-420.1	Cross Bay Boom	2000				8 med weight anchor systems	2				4
12	6-425.1	USN Amphibious Base									Contact duty veterinarian	1
		13 - 24 hours	1500	11200	0	0	32			0		
16	6-430.2	USN Delta Beach	1500				6 light wt anchor systems	2				6
16	6-435.2	Paradise Marsh		500			2 light wt anchor systems	2				6
24	6-440.2	Sweetwater River NWLRefuge		6500			14 light wt anchor systems	2				6
24	6-445.2	J Street Marsh		2000			4 light wt anchor systems	2				6
24	6-450.2	Chula Vista Wildlife Reserve		2000			4 light wt anchor systems	2				6
24	6-455.2	South Bay NWL Refuge and Otay River		200			2 light wt anchor systems		1		close flood gates	4
24	6-460.2	Emory Cove Marsh									300 sand bags	15
		25 - 60 hours	3000	0	0		24			0	Significant & various additional materials & equipment	

SHORELINE PROTECTION TABLE - SAN DIEGO BAY AT CORONADO BRIDGE 07/17/06

Protect by hour	Strategy or Site Number	Site Name	Harbor Boom	Swamp Boom	Other Boom Amt Type	Sorbent Boom	Anchoring Systems No. Kind	Boom Boats	Skiffs	Skimmers No. Type	Special Equipment and Notes	Staff
		First 6 hours	3500	7000	0	0	30			0		
2	6-420.1*	Cross Bay Boom	2000				8 md weight anchor systems	1				4
2	6-425.1	USN Amphibious Base									Contact duty vererinarian	1
3	6-430.2	USN Delta Beach	1500				6 light wt anchor systems	2				6
4	6-435.2	Paradise Marsh		500			2 light wt anchor systems	2				6
5	6-440.2	Sweetwater River NWLRefuge		6500			14 light wt anchor systems	2				6
A688* up to 2000 ft of containment boom required to meet the 2 hour on-water containment requirement can be utilized												
		7 - 12 hours	1200	0	0	0	6			0		
7	6-455.2	South Bay NWL Refuge and Otay River	200				2 light wt anchor systems		1		close flood gates	4
8	6-460.2	Emory Cove Marsh									300 sand bags	15
10	6-400.10	Harbor Island Marina	1000				4 light wt anchor systems	1				4
		13 - 24 hours	3000	0	0	0	10			0		
18	6.400.9	Commercial Basin	1000				4 light wt anchor systems	1				4
20	6-400.8	Shelter Island Marina	500				3 light wt anchor systems	1				4
22	6-410.1	USN Marine Mammals Research Center									Immediately contact duty vererinarian	1
24	6-415.1	Navy Magnetic Silenceing Facility	1500				3 light wt anchor systems	1				3
		25 - 60 hours	3000	4000	0	0	32			0	Significant & various additional materials & equipment	

Small Harbor BAP Shoreline Requirements for Small Vessel Response Plans														07/17/06
Harbor	deploy by hour	Strategy or Site Number	Site Name / location	Harbor Boom	Swamp Boom	Sorbent Boom	Anchor No.	Systems Kind	Boom Boats	Skiffs	Skimmers No. Type	Special Equipment and Notes	Staff	
Crescent City	3	as needed	Crescent City	1000		200	4	Danforth anchoring systems	1			oil sweep can be substituted for sorbent boom	3	
Shelter Cove	3	as needed	Shelter Cove		1000	200	4	Danforth anchoring systems		1		oil sweep can be substituted for sorbent boom	3	
Fort Bragg	3	as needed	Noyo Harbor		1000	200	4	Danforth anchoring systems		1		oil sweep can be substituted for sorbent boom	3	
Albion	3	as needed	Albion		1000	200	8	Danforth anchoring systems		1		oil sweep can be substituted for sorbent boom	3	
Bodega Bay	3	2-118.2	Bodega Harbor	1800			12	22+lb danforths	2	1			8	
	3	as needed	Bodega Harbor		1000	200	4	anchoring systems						
Bolinas	3	2-146.1	Bolinas Lagoon		3000	200	8	4x12+## anchors + 4 stakes		3			6	
Pillar Point	3	2-162.4	Pillar Point Marsh & Denniston Creek	500			9	2/50+ & 7/22 danforths + chains	1	1			5	
	3	as needed	Pillar Point Marsh & Denniston Creek		1000	200	4	anchoring systems						
	7	2-162.4	Pillar Point Marsh & Denniston Creek								1 SPS			
Santa Cruz	3	3-210.1	Santa Cruz Harbor Entrance	1200			3	Danforth anchoring systems	1				3	
	7	3-220.1	Santa Cruz Harbor Entrance								1 SPS	simmer with 3 staff	3	
	7	3-210.1	San Lorenzo River Inlet		800		3	Danforth anchoring systems				4000sand bags, 6000' 6" PVC pipe or berm	20	
Moss Landing	3	as needed			1000	200	4	Danforth anchoring systems		1			3	
	7	3-305.1	Moss Landing Inlet	5500	1600		10	7 Stakes & 3 Danforth	4		3 SFS	Share VSW boom boats + Elkhorn Slough crew.	20	
	7	3-310.1	Elkhorn Slough		6000		8	4 Stakes & 4 Danforth as needed	2		2 SFS	Remark: backup to Moss Landing - one or more chevrons. VSW boomboat	10	
Morro Bay	3	4-200.2	Morro Bay Inlet	2000			2	40 lb. Anchors	2				6	
	7	4-225.1	Chorro Creek Inlet		50		2	small anchors or stakes					4	
	7	4-230.1	Los Osos Creek Inlet		50		2	small anchors or stakes					4	
	7	4-235.2	Sweet Springs Marsh		50		2	small anchors or stakes					4	
	7	4-240.1	Cuesta by the Sea Inlet		200		2	small anchors or stakes					4	
Port San Luis / Avilla	3	as needed	Port San Luis / Avilla	1200		200	4	Danforth anchoring systems	1				3	
Santa Barbara Harbor	3	4-665.2	Santa Barbara Harbor	2500		1000	8	anchoring systems	2				10	
	7	4-670.2	Mission Creek / Laguna Channel		400	400	6	anchoring systems					5	
	7	4-672.2	Sycamore Creek and Andre Clark Bird Refuge		400	400	8	anchoring systems					2	
Ventura Harbor	3	4-747.2	Ventura Harbor	2000		1000	15	anchoring systems	2	2	1 SSS	1 FE loader, 1 roll plastic, 40 sand bags, 6 culverts, 150 stakes	8	
	3	4-750.3	Santa Clara River estuary		1500	1000	6	anchoring systems		1			2	
Channel Islands Harbor	3	4-775.2	Channel Islands Harbor	3000		1500	8	anchoring systems	2	2			8	
Marina Del Rey	3	as needed	Marina Del Rey		1000	200	3	anchoring systems	1				3	
	3	5-040.1	Ballona Creek	500			3	anchoring systems	1				3	
	3	5-050.1	Ballona Lagoon Wetlands									Close Tidal Gates. Bolt Cutter	1	
King Harbor	3	as needed	King Harbor		1000	200	4	anchoring systems		1			3	
Dana Point	3	as needed	Dana Point Harbor		1000	200	4	anchoring systems		1			2	
	3	5-490.2	San Juan Creek									1000' of Filter Barrier Fencing and posts	10	
Newport Bay Harbor	3	5-460.1	Lower Newport Bay	2000			5	anchoring systems	1				3	
	7	5-465.1	Upper Newport Bay	1000			4	anchoring systems	1				3	
Oceanside/Carlsbad	3	as needed	Oceanside & Carlsbad harbors		1000		4	anchoring systems					3	
	7	6-145.2	Santa Margarita River	3000			8	anchoring systems	2				3	
Mission Bay	3	6-200.1	Mission Bay entrance	800			2	anchoring systems	1				3	
	3	6-200.2	Mission Bay entrance	700			2	anchoring systems		1			2	
	3	6-200.3	Mission Bay entrance	400			1	anchoring systems		1			2	
	7	as needed	Mission Bay		5000		12	anchoring systems		2			4	

Glossary of Terms Used in the BAP Shoreline Protection Tables - July 17, 2006

Anchoring Systems – Anchoring systems refer to anchors, stakes and other devices necessary to secure booms and other mechanically deployed protection measures. When used to identify anchors, whether expressly stated or not, anchoring systems must be sufficient to hold boom in the aggressive currents such as are common to SF Bay and other California estuaries. Typically systems are presented as a number of anchors and minimal weight (e.g., 3/12+ - means three anchors of a minimum of 12 lbs each) with at least an equal weight of anchor chain weight whether specified or not; without substantial anchor chain weight, anchors will not hold. To insure successful anchoring, the anchoring system should include: anchors with anchor buoys to control placement, anchor chains which equal or exceed the weight of anchors, enough line to produce adequate scope to hold anchors (rule of thumb is 3:1 (line to depth), but 5-7:1 for high current areas), and a crown buoy between anchor line and boom to keep the anchor from sinking the boom under strong currents.

BBoat – see Boom Boat

Boom Boats - a boat suitable for transporting, towing and deploying large amounts of boom, usually crewed with a helmsman and two crew for deployment. Numbers of such boats usually are referenced in terms of boom boat equivalent (BBE). BBE is the capability of a vessel to transport and deploy 600 feet of Harbor Boom or 1800 ft of Swamp Boom. Actual vessels may be capable of transporting greater or lesser amounts of boom. Boom boats must be capable of grounding without sustaining damage. (Also see Shallow Water Boom Boats and Very Shallow Water Boom Boats.)

Danforth - refers to "danforth anchors" with chain. Northill anchors and other anchor types which "dig in" are equivalent.

FELoader – Front-end-loader or skip-loader: mechanical equipment with mechanical scoop or bucket for moving sediment.

GNOME – General NOAA Oil Spill Modeling Environment

Harbor Boom - an inland waters type boom (greater than 18" and less than 42" overall (flotation and skirt)) of a curtain boom design (skirted boom with solid flotation). Early strategies attempted to clarify boom size by indicating flotation and skirt as follows: 9X9+ which indicated a boom with at least 9" of flotation and 9" of skirt, and would now be interpreted as at least 18" overall. This boom type typically has strength members (steel cable and chain) in both upper and lower margins.

Protect By Hour – the hour after the release when the site must be protected to insure that the site protection is in place before the oil is likely to impact. Generally, this time is about an hour prior to impact, but may be otherwise due to uncertainty of impact time.

Other Boom – is any boom other than harbor boom, swamp boom, or sorbent boom. This term is used to simplify equipment tables. A type designator should be used as well as a length. Type designators include:

TB or **TBB** – tidal barrier boom or Texas barrier boom

OB – ocean boom

OS – oil snare

SWEP – oil sweep: sorbent pads in continuous strips

Shallow Water – less than three feet of water

Shallow Water Boom Boats - a boom boat capable of working in three feet of water or less, and should be able to withstand stranding without sustaining damage.

Skiff - a small two person craft able to operate in 3 foot waves or larger and capable of delivering personnel and equipment to shores.

Skimmer – refers to a skimming system. A skimming system includes a collection device (such as a weir, rope-mop, drum, or other skimming design to separate oil from the aqueous environment), storage for collected material, power supply to power such a system, and all the hoses and connectors necessary for system operation. Types of skimmers refer to the configuration of the deployment of such systems rather than a particular device or manufacturer.

SFS - stationary floating skimmer - a floating platform supporting a skimmer and storage.

SPS - self-propelled skimmer - a small to medium sized skimmer with its own propulsion and storage.

SSS - shore side skimmer, includes a skimming unit, such as a rope-mop or weir skimmer and its support pack and a storage container such as a vacuum truck, baker tank, or other tank.

SWS – Shallow Water Skimmers - Skimmers capable of operating in less than two feet of water.

Towed Skimming Array - a skimming system with two boats towing collection booms connected to a skimmer (in a "V" formation) to funnel oil to the skimmer and may be referred to with the acronyms TSA and VSA.

TSA – (towed skimming array as above) – a skimming array with two boats towing collection booms which funnel oil to a skimming system, of either SPS or SFS design.

VSA – "V"-Skimming Array -Same as TSA

OSRV – Oil Spill Response Vessel. A large self powered vessel dedicated to oil spill skimming and response

VOSS – Vessel of Opportunity Skimming System – Usually moderate to large vessel which can be equipped with a skimming device and storage to create a mobile on-water skimmer capable of operating in local conditions and waters.

Sorbent Boom – sorbents in a boom or sausage-like construction with or without a skirt.

Strategy or Site Number – deployments are listed in the Area Contingency Plan by a site number or as a strategy number which includes the site number.

Swamp Boom - a river boom type (less than 18" overall, usually less than 12" overall) of a curtain boom design. Usually this boom has much lighter strength members, commonly only a single chain in the skirt. This boom is suitable for modest currents and locations without waves.

VSW – very shallow water

Very Shallow Water – less than two feet of water

Very Shallow Water Boom Boats - a boom boat capable of working in two feet of water or less, and should be able to withstand stranding without sustaining damage.